

# Impact of In-Service Training and Staff Development on Workers' Job Performance and Optimal Productivity in Public Secondary Schools in Osun State, Nigeria

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## Abstract

This study investigated the impact of in-service training and staff development on workers' job performance and optimal productivity in public secondary schools in Osun State, Nigeria. The study used the ex-post-facto research design. Three research questions and three hypotheses were generated and tested using questionnaire items adapted from Raja et al (2014) but subjected to manipulation by the researchers which contained closed ended type of questionnaire based on the research questions and hypotheses and was structured on a four points Likert scale. The instrument was administered to a purposely selected population of 152 respondents while 134 questionnaires were returned. Data generated were analyzed using Analysis of Variance (ANOVA) and Multiple Regression Analysis to test the hypotheses at 0.05 level of significance. The findings show that results showed that in-service training and staff development had insignificant combined effects but significant relative effects on workers' optimal job productivity. The study therefore recommended that schools should design proper and functioning in-service training and staff development programmes for their workers to boost their morale, enhance their performance and in addition ensure that workers training are conducted frequently to ensure they cope with changing technological environment and organizational climate in schools.

**Keywords:** in-service training, staff development, productivity, optimal job performance, Osun State, Nigeria

## 1. Introduction

The history of training can be traced to industrial revolution in the eighteen century when technological advancements created an ongoing need for workers training. On the other hand, training and development evolved when Fredrick Taylor recognized that workers are important and efficient as machine. Taylor asserted that it is the workers and management that set the pace for production. Hence, there is need for manpower training and development in order to enhance the organizational predetermined goal. Aroge (2012) asserts that "scientific management is not a collection of technique only to increase efficiency, but rather a philosophy of being accomplished by workers training and development".

In Nigeria, the origin of manpower training and development can be traced to the Ashby Commission set up in 1959 to conduct an investigation into Nigeria's personnel need in the areas of post-secondary school certificate and higher education over the next twenty years. Following this development, the Federal Government has since established a number of training institutions such as:

- (i) The Industrial Training Fund (ITF) in 1971;
- (ii) The Nigerian Council for Management Development (the training arm of the institution is known as Centre for Management Development (CMD) in 1973;
- (iii) The Administration Staff College of Nigeria (ASCON) in 1973;
- (iv) The Nigeria Institute for Policy and Strategic Studies (NIPSS) in 1979;
- (iv) The Agricultural and Rural Management Training Institution (ARMTI) in 1980 and
- (v) Michael Imoudi National Institute of Labour Studies (MINILS) in 1992.

Apart from the aforementioned, Aroge (2012) asserts that there are various federal and state training centers all over the country. The private sectors also established their own training centers and schools while many others depend on private consultants and university organized training programmes and seminars as well as executive development and general management courses run by the Nigeria Institutes of Management (NIM) and that of Institute of Personnel Management (IPM). It is pertinent to note that there must be continuous reviews of manpower training to ensure that there is effectiveness throughout the organization so as to enable the organization achieve its objectives. It is also believed that a vast majority of new employees have not been prepared to perform the job they may encounter in their organizations irrespective of the technical or professional education they received. According to Raja et al (2014) "there is therefore need for training and retraining of the workers to perform new jobs and adapt to changing technology".

Even though there is an avalanche of empirical studies on the effect of training and development on productivity, the existing evidence suggests that research in this area is promising. Most of the studies reviewed were carried outside the shores of Nigeria, while others were mostly done in the financial sector. The few studies conducted on the educational sector did not focus on training and development. Unlike educational sector, most

Nigerian sectors could not survive the recent global financial crisis. Meanwhile, most of the challenges that had threatened the foundations of the educational sector in Nigeria had been squarely blamed on the lack of employees training in the sector. This study is therefore motivated by the need to fill these gaps.

The main object of every school management is to improve its performance but it can never be possible without the efficient performance of workers. This is in consonance with the submission of Neelam et al (2014) that “the performance management system came into effect as a management reform to address and redress concerns, organizations had about performance”.

Workers’ in-service training and development are essential work activities that contribute significantly to the overall effectiveness and profitability of schools. The effectiveness and success of a school lies on the people who form the workforce and work within the school (Onuka, 2006). The observation of Onuka (2006) is that “it is the developed human capital of a school that constitutes its performance. It follows, therefore, that workers’ productivity in respect of achieving school goals and successes is a function of the quantum of the relevant skills and knowledge, and positive work attitude workers have been able to acquire from constant manpower development programmes whether through on the job training or in-house training programmes of out of work training courses they attended”.

Workers’ Productivity refers to the accomplishment of workers or mere working effectiveness. In an organization, efficiency and productivity are mostly realized at the levels of organization, process and individuals and the interrelationships among these will define the vantage points of the organization. In contributing to the overall goal of the organization, training and development processes are implemented as this benefits not just the organization but also the individuals making up that organization (Onuka & Ajayi, 2012).

At its core is the improvement in the performance of individuals participating in training and development activities. Learning is mostly achieved through in-service training and development therefore means to be translated as organizational resource by which the people acquire, infer and utilized (Ezeani, 2013).

## 2. Statement of the Problem

Many studies have been conducted on training and development and their effects on workers’ productivity. These studies were conducted in hospitals (Audu & Gunjul, 2014), manufacturing companies (Onuka & Ajayi, 2012), banks (Neelam et al, 2014; Ezeani, 2013) and insurance companies (Raja et al, 2014). The dearth of similar studies in public secondary school settings motivated the researchers to consider investigating the impact of in-service training and staff development on workers’ job performance and optimal productivity in public secondary schools in Osun State of Nigeria. This is against the backdrop that there is a popular belief in Nigeria that public workers tend to be less concerned with optimal job productivity in as much as their salaries are paid at the end of the month. In addition, there appears to be scarcity of existing literature on in-service training and staff development and workers performance and job productivity in public secondary school settings. The study is therefore necessary to fill the gap in this area. Ezeani (2013) adopted mean and grand mean to test the relationship between training and development and workers’ productivity. Raja et al (2014) adopted t-test while Onuka and Ajayi (2012) adopted chi-square to test the impact of training and development on workers’ productivity. Considering the aforementioned, none of the researches conducted employed Analysis of Variance (ANOVA). The study therefore is necessary in that it will employ ANOVA to test the relationship between training and workers’ optimal job productivity.

## 3. Objectives of the Study

This study has the following as its objectives:

- i. assess the effects of workers in-service training on workers’ optimal job productivity in public secondary schools in Osun State of Nigeria;
- ii. ascertain the impact of workers’ staff development on optimal job performance of public secondary school workers in Osun State of Nigeria;
- iii. appraise the combined and relative impact of workers’ in-service training and workers’ staff development on workers’ optimal job productivity.

## 4. Research Questions

This study was guided by three main research questions.

- RQ 1 Does in-service training affect workers’ optimal job performance in public secondary schools in Osun State of Nigeria?
- RQ 2 Is there any significant relationship between staff development and optimal job productivity of workers in public secondary schools in Osun State of Nigeria?
- RQ 3 Do in-service training and staff development have relative impact on workers’ optimal job productivity in public secondary schools in Osun State of Nigeria?

## 5. Hypotheses

The following are the hypotheses that guided this study:

H<sub>01</sub>: In-service training does not affect workers' optimal job performance in public secondary schools in Osun State of Nigeria.

H<sub>02</sub>: There is no significant relationship between staff development and workers' optimal job productivity in public secondary schools in Osun State of Nigeria.

H<sub>03</sub>: In-service training and staff development does not have combined and relative effect on workers' optimal job productivity in public secondary schools in Osun State of Nigeria.

## 6. Materials and Methods

The study adopted descriptive research design of the ex-post facto. The population of the study comprised of all workers (both teaching and non-teaching staff) in ten public secondary schools randomly selected in Osogbo Local Government Area of Osun State. The study population included two hundred and forty four (244) workers in these ten (10) public secondary schools considered for the study. The population is finite and heterogeneous because it comprises of different workers from different schools. The study sample is obtained using the formula used by Saunder (2007) to determine sample of his study. According to Saunder (2007), sample size can be determined using the formula below:

$$n = \frac{N}{1 + N(\alpha)^2}$$

Where:

n = sample size

N = population size

$\alpha$  = margin of error

N = 244

$\alpha = 5\% (0.05)$

Therefore, sample size (n) is computed thus:

$$\begin{aligned} n &= \frac{244}{1 + 244(0.05)^2} \\ n &= \frac{244}{1 + 244(0.0025)} \\ n &= \frac{244}{1 + 0.61} \\ n &= \frac{244}{1.61} \\ n &= 151.55 \\ n &= 152 \end{aligned}$$

Therefore, the study sample includes 152 workers from ten senior secondary schools in Osogbo Local Government Area of Osun State using simple random sampling technique because it allows items in population fair chances for inclusion in study frame. The questionnaire items are adapted from Raja et al (2014) but subjected to manipulation by the researchers. Closed ended type of questionnaire was used for the study. The questionnaire is structured to contain four sections. Section one contains the demographic variables of respondents. Section two contains items on workers' training, workers development and workers' productivity. One hundred and fifty-two (152) questionnaires were administered to respondents but only one hundred and thirty-four (134) questionnaires were returned. The one hundred and thirty-four (134) returned questionnaires were valid instruments for the study. Descriptive statistics such as mean and standard deviation were used to analyze the research questions while Analysis of Variance (ANOVA) and regression analysis were used to analyze the statements of relationship among the study variables.

## 7. Data Analysis and Interpretation

The result of the analysis that guided this study is thus presented below. Each of the table represented the outcome of the study in line with the formulated hypotheses.

### Research Question 1

Does in-service training affect workers' optimal job performance?

To answer this question, items 1, 2, 3, 4 and 5 were used.

Table 1: Mean Response on effect of in-service training on workers' optimal job performance.

S/N	Respondents' Factors	Mean	SD	Remarks
1	My school organizes in-service training for workers.	2.58	.51	Rejected
2	In-service training programmes in the school are frequent.	2.42	.52	Rejected
3	In-service training enhances my work capabilities.	3.12	.68	Accepted
4	In-service training motivates me to work effectively.	3.27	.79	Accepted
5.	Due to in-service training, my competency level increases.	3.05	.63	Accepted
<b>Grand Mean</b>		<b>2.88</b>	<b>.63</b>	<b>Rejected</b>

The critical value for the analysis was 3.00. Result revealed that the grand mean was 2.88. Items 3, 4 and 5 were accepted because they had mean values greater than 3.0 while items 1 and 2 were rejected because they have mean values lower than 3.0. The critical value was higher than the statistical value. This led to the rejection of the statements. From the analysis it was concluded as follows: schools did not organize training for workers; training programmes in schools are not frequent, training enhanced workers capabilities, training motivated workers effectively and training increased the competence of workers in schools.

### Hypothesis I

**H01:** In-service training does not affect workers' optimal job performance.

Table 2: Summary of ANOVA Result on the effect of workers' in-service training and workers' optimal performance

Regression		ANOVA				
Model	Source	Sum of Squares	Df	Mean Square	F	Sig
R = .728 <sup>a</sup>	Regression	512.991	2	21.751	12.045	051 <sup>a</sup>
R <sup>2</sup> = .530	Residual	821.005	130	36.116		
Adj.R <sup>2</sup> =.426	Total	1,333.996	132			

Significant level at 0.05 (2 tailed).

Table 2 showed the summary of the ANOVA result on the effect of workers' training and workers' performance. Results revealed that workers in-service training does not significant affect workers' performance ( $F_{(132)}=12.045$ ;  $p > 0.05$ ). The result showed that the significance value of 0.051 was higher than the probability value of 0.05. This showed insignificant relationship between in-service training and workers' optimal job performance. Therefore, the null hypothesis which stated that in-service training does not enhance workers' optimal job productivity was accepted. It was therefore concluded that in-service training does not significantly affect workers' optimal job performance.

### Research Questions 2

Is there significant relationship between staff development and optimal productivity?

Items 6, 7, 8, 9 and 10 were analyzed to answer this question. The results of analysis were contained in table 4.4 below:

Table 3: Mean Response on relationship between workers development and productivity.

S/N	Respondents' Factors	Mean	SD	Remarks
6	There are well designed workers staff development programme in my school.	2.15	.62	Rejected
	Staff development allows me to learn new skills to perform better on the job.	3.16	.77	Accepted
8	Through staff development, I cope with constant changes on the job.	3.05	.81	Accepted
9	My superior allows me to try my ideas.	2.52	.51	Rejected
10	I am less supervised due to existence of staff development programmes in the school.	2.62	.60	Rejected
<b>Grand Mean</b>		<b>2.70</b>	<b>.66</b>	<b>Rejected</b>

The critical value for the analysis was 3.00. Result revealed that the grand mean was 2.88. Items 7 and 8 were accepted because they had mean values of 3.16 and 3.05 which were greater than 3.0 while items 6, 9 and 10 were rejected because they had mean values of 2.15, 2.52 and 2.62 which were lower than 3.0 critical value pegged for the study. The critical value was higher than the statistical value. This led to the rejection of the statements. From the analysis it was concluded as follows: there was no proper designed development programmes in the schools; development allowed school workers to learn new skills needed to perform better on their jobs; workers coped with constant changes on the job as a result of developmental programmes; superiors do not allow subordinate to try their ideas and workers were rigorously supervised as a result of lack of developmental programmes in schools.

### Hypothesis II

**H02:** There is no significant relationship between staff development and workers' optimal job productivity.

Table 4: Summary of Regression Result on the relationship between staff development and optimal job productivity.

Regression		ANOVA				
Model	Source	Sum of Squares	Df	Mean Square	F	Sig
R = .541 <sup>a</sup>	Regression	412.045	2	42.011	5.672	.065 <sup>a</sup>
R <sup>2</sup> = .293	Residual	620.682		23.091		
Adj. R <sup>2</sup> = .211	Total	1,032.727	132			

Significant level at 0.05 (2 tailed).

Table 4 above depicted the summary of the regression result on the relationship between workers' development and workers' optimal job productivity. Results revealed that there was no significant relationship between workers' development and workers' productivity ( $t_{(132)} = 5.672$ ;  $p > 0.05$ ). The result showed that the significance value of 0.065 was higher than the probability value of 0.05. This showed insignificant relationship between workers' development and workers' optimal job productivity. Also, the R value of 54% (0.541) showed that there was positive but mild relationship between workers' development and productivity while the R<sup>2</sup> value of 29.3% (0.293) indicated that workers' development accounted for 29% variation in workers' productivity. Therefore, the null hypothesis which stated that was no significant relationship between workers development and productivity was accepted. It was therefore concluded that although, there was positive relationship between workers development and workers' productivity, the relationship was not significant.

### Research Question 3

Do in-service training and staff development have relative impacts on workers' optimal job productivity?

Items 11, 12, 13, 14 and 15 were analyzed to proffer answer to this question. The analysis was shown in table 4.6 below:

Table 5: Mean Response on relative effect of workers' in-service training and staff development on workers' job optimal productivity.

S/N	Respondents' Factors	Mean	SD	Remarks
11	I perform more when given in-service training.	3.61	.85	Accepted
12	My Performance and productivity increase due to enhanced competency I exhibited.	3.26	.63	Accepted
13	My productivity increases as a result of reward system in my organization.	2.73	.54	Rejected
14	My organization's productivity increase due to the positive attitude of employees.	3.17	.83	Accepted
15	My organization's productivity greatly depend on in-service training & staff development	3.05	.68	Accepted
<b>Grand Mean</b>		<b>3.14</b>	<b>.66</b>	<b>Accepted</b>

The critical value for this type of analysis was 3.00. Result revealed that the grand mean was 2.88. Items 11, 12, 14 and 15 were accepted because they had mean values greater than 3.0 while items 13 was rejected because it had mean values lower than 3.0. The critical value was higher than the statistical value. This led to the acceptance of the statements. From the analysis it was concluded as follows: workers performed more when trained; workers performance and productivity increased due to enhanced competency they exhibited; increase in workers' productivity was not as a result of reward system in schools; schools' productivity increased due to the positive attitude of employees and schools productivity largely depends on training and development.

### Hypothesis III

**H03:** In-service training and staff development do not have relative effect on workers' productivity.

Table 6: Presentation of Regression Result on relative effects of in-service training and staff development on workers' productivity

Dependent Variable: Workers Performance					
Variable	Coefficient	F-Stat	F-Stat (Prob.)	Sig.	T-Test
In-service Training	7.265	7.281	0.061	0.052	8.429
Staff Development	5.590			0.061	9.452
Constant	6.507			0.055	2.781

**R-Square = 0.825**  
**Adj. R square = 0.692**  
**Durbin Watson = 1.850**

The result revealed that the coefficient of the constant term (6.507) was positive. This indicated that positive association existed between dependent variable and independent variables. The coefficients of in-service

training and development were 7.265 and 5.590. The results indicated that in-service training and development had positive effect on workers' optimal job productivity.

The F-Stat value of 7.281 indicated the overall significance of the model. The value indicated that the model is insignificant. The result indicated that the f-stat value was greater than the significance value of 0.061.

The R-square value of 83% also indicated the coefficient of determination for the model. The result showed that in-service training and development for 83% of variation in workers' productivity. The remaining 17% variation in workers' optimal job productivity was accounted for by other factors other than the independent variables.

Durbin Watson value of 1.850 was less than 2.0. This showed the multiple auto-correlation between in-service training and development and workers' optimal job productivity which also mean that there were multiple auto-correlations between the independent variables and the dependent variables. Also, the value indicated that the model possess the quality of a good model. This implied that the model was unbiased, efficient, consistent and sufficient.

Conclusively, results showed that in-service training and staff development had insignificant combined effect but significant relative effects on workers' optimal job productivity.

## 8. Discussion

The study was guided by three hypotheses. The first and second hypotheses were analyzed using Analysis of Variance (ANOVA) while the third hypothesis was analyzed using multiple regression analysis. The results from the analysis of the three statements of relationship formulated for the study were discussed in the subsequent paragraphs.

The result of the first analysis revealed that workers' training does not significantly affect workers' performance. The result was a result of lack proper in-service training programme and infrequency of training programmes in schools. This result was in line with the conclusion of Oni et al (2013) and Atif et al (2011) who concluded that workers' training had insignificant effect on workers' productivity but the result refuted the claimed by Chris (2011), Samaneh & Zoure (2014) and Aroge (2012) who found significant relationship between workers' training and workers' performance.

Result also showed that there was no significant relationship between development and workers' optimal job productivity. The result was as a result of the fact that most schools do not have well designed staff development programmes. Superiors do not allow subordinates to try their ideas and the excessive workers supervision of school workers as a result of lack of developmental programmes in schools. The result of the study supported the findings of Iwuoha (2002) who concluded that staff development has no significant relationship with workers' productivity. It also disagreed with the conclusion of Ezeani & Oladele (2013) who claimed that development had significant relationship with workers' performance.

The results further showed that in-service training and development had insignificant combined effect on workers' productivity. This finding was in line with the conclusion of Atif et al (2011) who found insignificant relationship between workers' training and development and workers' productivity.

## 9. Conclusion

Personnel management is an important activity in school management which reflects the innovativeness of workers in such schools and also indicates new way of working principles for working relations and enhancing workers' productivity and optimal job performance. In-service training and workers' development should be important issues in school personnel management since any goal driven schools should always strive to employ the services of skilled and capable workers for better productivity. Workers competency increases when they have the requisite knowledge and skills of doing the task assigned to them and these may not be readily available at the entry point. This is made possible through the constant and frequent in-service training and development programmes. In-service training and Development provide workers with the opportunities to improve their career opportunities and enhances them to get better positions in the organization and in doing so, organizations efficiency would be increased.

On the other hand, workers are the assets and resources of schools. In-service training would increase their skills and enables them to perform better than those who are unskilled and untrained.

Workers in any school are the most invaluable asset for schools' growth and development. As a result, workers' in-service training is an important component of workers' development which helps school workers to learn how to use the resources in an approved way and also allows schools to meet their desired targets.

## 10. Recommendations

Based on the findings and conclusion of the study, it was recommended among others that schools should design proper and functioning in-service training programmes for their workers to enhance their performance. School managements should also ensure workers training are conducted frequently to ensure they cope with changing

climate in schools. Workers should be given some degree of autonomy in the use of their ideas to ensure they contribute positively to schools effectiveness and performance. Workers should be exposed to seminars, conferences, workshops, regular professional training in areas such as career development, pre-service and off-the-job-pupilage training. This will enhance their productivity in the schools and also enable them keep abreast with the challenges posed by modern schools' requirements.

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